

# EXHIBIT 1

David T. Curiel, M.D., Ph.D.  
Professor of Radiation Oncology  
Washington University School of Medicine  
660 S. Euclid Avenue  
MSC 8224-35-LL  
St. Louis, MO 63110

I. Introduction and Qualifications.

I am David T. Curiel, M.D., Ph.D., Professor of Radiation Oncology at Washington University School of Medicine in St. Louis, MO. I have been a faculty member in an academic institution since 1989. Over the course of my career, I have been continuously funded by the National Institutes of Health ("NIH") for more than 30 years. This has included more than 40 million dollars in NIH funding for 135 projects supported by nine distinct NIH institutes (including the National Cancer Institute or NCI; National Heart, Lung, and Blood Institute or NHLBI; the National Institute of Allergy and Infectious Diseases, or NIAID; the National Institute of Biomedical Imaging and Bioengineering, or NIBIB; the National Institute for Advancing Translational Sciences, or NCATS; the National Institute on Aging, or NIA; the National Institute of Dental Craniofacial Research, or NIDCR; the National Institute of Diabetes and Digestive and Kidney Diseases, or NIDDK; and the National Center for Research Resources, or NCRR).

In addition to being the recipient of significant NIH funding over several decades, I have served as an active reviewer for NIH. This has included serving as a member of the External Advisory Board of NIH's National Institute of Dental and Craniofacial Research, membership in more than 30 standing and Ad Hoc NIH Study Sections and dozens of review groups. This service has been continuous over the last 30 years and is active at the present time.

Moreover, I have substantial internal NIH experience. My expertise in this regard at the NIH stems as well from the fact that I completed my post-doctoral traineeship at the NIH/National Institutes of Heart/Lung and Blood Disorders Institute (NHLBI) Pulmonary Branch at the Bethesda Campus. This intimate knowledge of NIH culture, as well as extensive NIH reviewship experience, has enabled me to provide expertise on the process of NIH grant acquisition. This has also included serving on numerous grant writing courses in my home institutions as well as serving on numerous faculty development mentorship committees.

In addition, I developed a professional Grant Writing Course which has been provided to a number of institutions who paid for this service over the past ten years. The course was intended to facilitate rising faculty in the acquisition of "R"-type NIH grants. I taught this course at approximately 7 institutions, with each having included approximately 30-50 faculty members at each session. I thus possess a unique, and extensive, knowledge of the NIH grant review process and provide this perspective in this report.

In this regard, my scientific expertise is broad, with major focus in the areas of gene therapy, vaccinology, and gene editing. Indeed, my postdoctoral training at the NIH was under the mentorship of the Field Fathers of gene therapy. Some highlights of my work include: (1) I was one of the first to show mRNA could serve as a vaccine; (2) lab developed the world's only approved intranasal vaccine for COVID-19. On the basis of the high level of innovation of my work, I was recently inducted as a Fellow of the National Academy of Inventors, one of the highest recognitions in science.

## II. Expert Opinion.

I am being asked to offer my opinion in the matter of *Alana M. O'Reilly, Ph.D. v. Temple University Health System, et al.*, Civ. A. No. 2:24-cv-05315 (E.D. Pa.), as to whether the timing of applications submitted by Plaintiff Alana M. O'Reilly, Ph.D. ("Plaintiff") for the ReWARD Grant funding mechanism had any impact on the prospects of the same being funded.

## III. Materials Reviewed.

In preparing this report, I reviewed the following materials:

- Court complaint of Plaintiff Alana M. O'Reilly filed with the U.S. District Court for the Eastern District of Pennsylvania, Civil Action No. 2:24-cv-05315-KSM
- NIH Program Announcement (PAR)-23-122
- NIH Program Announcement (PAR)-25-117
- Transcript of deposition of Alana M. O'Reilly 3/13/25
- Grant submission to NIH of Alana M. O'Reilly dated 10/2/23
- 4/4/24 Summary Statement of 10/2/23 grant submission to NIH of Alana M. O'Reilly
- Grant submission to NIH of Alana M. O'Reilly dated 7/1/24
- 12/13/24 Summary Statement of Grant submission to NIH of Alana M. O'Reilly dated 7/1/24
- NIH RePORT/RePORTER, available at <https://reporter.nih.gov/> (last visited May 2, 2025).
- Exhibit P-DEP-47, August 11, 2023 email from Dr. David Wiest to Dr. Jonathan Chernoff, with chain.

## IV. Factual Background and Analysis of Plaintiff's ReWARD Grant Application.

NIH maintains a publicly available listing of opportunities facilitating faculty applications for research project grant funding. Such grant applications are reviewed by committees of peer scientists, termed "study sections", with grant themes matched to study section expertise. In addition to the possibility of advancing study of any given topic, the NIH regularly identifies research themes for which it solicits grant applications.



These may be responsive to a public health issue (e.g., seeking vaccine grants in response to a pandemic) or seek to address other need areas within the public health sphere (e.g., increasing the number of minorities within academic medicine). These solicitations are termed “RFAs” (request for applications) or “PAs” (program announcements).

Plaintiff submitted two applications to NIH in response to an NIH solicitation titled: “Research with activities related to diversity (ReWARD).”<sup>1</sup> Such a solicitation (known in the field as a “Program Announcement”) typically indicates the NIH’s interest in receiving grant applications on a given topic or theme. The ReWARD Grant Program Announcement (PA) (PAR-23-122), was posted on the NIH website on or about March 17, 2023. See <https://grants.nih.gov/funding/searchguide> (last visited May 2, 2025). The initial deadline for grant applications submitted in response to the ReWARD Grant PA was June 5, 2023; subsequent deadlines were October 5, 2023, February 5, 2024, June 5, 2024, and October 5, 2024. The PA was then reissued on November 6, 2024, with a new set of submission deadlines.

The purpose of this ReWARD Grant solicitation was to provide support for the health-related research of scientists who had been making significant contributions to Diversity, Inclusion, and Accessibility (DEIA) and who had no concurrent NIH research project grant funding. PIs who apply for the ReWARD Grant, like any other NIH grant, should have robust research aims and strategies that are rigorous, feasible, and likely to push forward the boundaries of scientific discovery. Of special note in this context, the NIH encourages institutional support of individuals who receive ReWARD Grant funding documented by way of an institutional letter of support. According to the Program Announcement, this institutional letter of support must be from the Department Chair, Dean, or equivalent leadership official. The letter of support should address:

1. The institutional commitment to DEIA initiatives.
2. That the time and effort requested by the applicant for the proposed research and DEIA activities will be provided.

Per specific PAR-23-122 instructions, applications lacking such an institutional letter would not be reviewed.

According to the documents that I have reviewed in preparing this report, Plaintiff initially sought to submit an application to NIH for a ReWARD Grant by its initial submission deadline of June 5, 2023. At that time, Plaintiff was NIH funded for a research project grant. (“Neurotransmitter signaling controls stem cell fate”) [5R21HD105295-02] as PI. According to the NIH Reporter, the budget end date of this award was March 31, 2024. If Plaintiff’s application to the ReWARD program by June

---

<sup>1</sup> My understanding based on my review of Plaintiff’s Court Complaint and deposition in this case is that this has come to be referred to as a “ReWARD Grant” and I will follow the same herein.

5, 2023 had been successful, the earliest start date of this new ReWARD Grant funding award would have been April 2024. The timing of the expiration of 5R21HD105295-02 would have thus made her eligible to receive ReWARD funding beginning in April 2024, as she would be compliant with the ReWARD Grant's requirement for "no current NIH research project grant funding."

As noted, after submission to NIH, grant applications are reviewed by appropriate review bodies. These consist of peer scientists with expertise relevant to the applications under review. In this regard, there exist "standing" Study Sections that embody specific areas of expertise (e.g., inflammatory lung diseases, gene therapy vector technology, etc.). In addition, for the context of solicited applications under the aegis of an RFA or PA (such as the application of Plaintiff), "Ad Hoc" review bodies are constituted that embody expertise in the themes outlined in the grant solicitation. The composition of these Ad Hoc review bodies may change with each review cycle, depending on the number, and type, of applications received. For example, when the Plaintiff initially submitted in October 2023, there were 15 reviewers. She resubmitted in July 2024, and there were 26 reviewers in this instance. Of note, the number of reviewers who served as reviewers on both occasions was only five (5). This is considered to be a favorable situation for the applicant.

After Study Section the reviewers submit written Critiques whereby the application's "score driving" strengths and weaknesses are addressed. The areas of analysis include factors such as Innovation, Approach, Personnel, etc. One of these areas of consideration is termed "Environment". This category embodies a range of factors. Included in this category is an assessment of the level of institutional support for the applicant and application. Key in this latter instance is a specific institutional letter of support, where stipulated in the solicitation.

At Study Section review, the 2-3 reviewers who considered the application will discuss the application from the standpoint of "score driving" strengths and weaknesses. Summary of these presentations, and the committee discussions, is contained within the written Critiques sent to the applicant, which, as noted, I reviewed in preparation of this report. Importantly, the "Resume and Discussion Summary" section embodies the most salient facets of the review noted by NIH program officials (POs) listening to the formal review. In essence, this Resume & Discussion highlights the applicant and the most critical facets of the committee's assessment of the grant. These critiques also contain specific discussion of reviewed categories (Innovation, Approach, etc.) with underscoring of the strengths and weaknesses within each considered category. Reviewers use this information to derive a numerical score which constitutes the basis of a funding decision of the application.

As noted, Plaintiff initially applied for the ReWARD Grant, or NIH PA-23-122 in October 2023. This initial application was reviewed by the Ad Hoc Study Section, entitled ZRG1 IVBH-G (56). Her score of 38 was not deemed fundable when the NIH



Council considered her application in May 2024. Of note, the Resume/Discussion summary of her application did not note any weaknesses with respect to the Environment. In fact, in the delineated Strengths of the Environment, specific acknowledgement was made of her institutional letter of support and the commitment of her institution to the goals of DEIA. No weaknesses were noted in the Environment by any of the three reviewers. For example, this critique provided, in this regard, "Fox Chase Cancer Center is a strong institution with dedication towards DEIA initiatives, as evidenced by the letter written by the Chief Scientific Officer of the Center."

As noted, this NIH PA offered a number of possible dates for submission. This fact enabled the possibility of the Plaintiff to offer on "amended" application for resubmission. In this context the key goal of a resubmitted application is to respond in a positive manner to points raised by the reviewers within the Critiques. In this manner, resubmissions embody the beneficial physiology of "fixing what was wrong" with the initial submission. Such revisions are summarized on the first page of the revised application as an "Introduction" document. As NIH Guidelines allow only one page for this Introduction, and as reviewers consider the revisions as an especially important score-drive facet in their consideration of a revised application, it is incumbent upon the applicant to address all of the key score-driving weaknesses noted at initial review.

Further with respect to this latter point, the Plaintiff submitted a revised application for NIH PA 22-122 in or about July 2024. This second application was reviewed by the Ad Hoc Study Section in or about December 2024. Plaintiff's score of 44 was not deemed fundable when the NIH Council considered her application in or about January 2025. As was the case for her initial submission, the Resume/Discussion summary of her amended application did not note any weaknesses with respect to the Environment. In fact, as before, in the delineated strengths of the Environment, specific acknowledgement was made of her institutional letter of support and the commitment of her institution to the goals of DEIA. No weaknesses were noted in the Environment by any of the three reviewers of the revised application. The Reviewers noted, however that the noted strengths were counterbalanced by Score driving weaknesses.

The vast majority of R01 applications, perhaps as many as 95%, are not successful on the initial submission. As a result, the utility of the resubmission of an amended application cannot be overstated. Investigators value the opportunity to directly respond to weaknesses identified in the Critiques as the most reliable way to improve their score. In this instance, the Plaintiff's score was significantly less competitive for her amended application than her initial submission. Such an outcome is generally believed to reflect the reviewer's view that score-driving Weaknesses were *not* addressed successfully in the amended application. This fact was in fact, noted in the Critique of the Plaintiff's amended application; these included overambitious scope of DEIA goals and concern as to whether high school students with no prior research experience would be able to produce interpretable, publication quality data. Of note,

there were concerns among the reviewers as to the PI's responsiveness to the concerns raised at review of the initial submission.

The Plaintiff asserts in her Oral Deposition of 3/13/25 that her R01 submitted in response to PAR-23-122 ("ReWARD") was intended for submission June 2023 and that there was critical significance to this timing. In other words, Plaintiff contends that, had she submitted by June 2023, her ReWARD grant submission had a better chance of being funded.

One of the reasons cited by Plaintiff was that by submitting at the first offered cycle deadline for this PA her grant would have an improved likelihood of funding. ("The second major reason, it was the first opportunity to submit that grant. And most people are not on the ball. Like, you basically get a less competitive pool, if you get it in on the first submission. So that would have given us a big boost in terms of potential to get the grant"; "That is certainly harm that I was basically forced to wait and get into a different pool that was likely to be more competitive").

This assertion is belied by a number of points: (1) This offering was advertised widely via the NIH Reporter. Information about the grant opportunity was posted 3/17/23 and available to the entire USA biomedical research community; (2) There were posted deadlines for this grant 6/5/23, 10/5/23, 2/5/24, 6/5/24, etc. In this regard, the program announcement mechanism presumes a "set aside" budget whereby adequate funds exist to fund meritorious grants at *each* cycle whereby the PAR opportunity was open; and (3) Ad Hoc review was utilized for this PAR. Therefore, each review cycle represented an independent body of experts who reviewed grants in a merit-based manner. In other words, there was no rush to come up-to-bat earlier, as the offering clearly embodied multiple funding cycles, and therefore it was not likely that an early cycle submission would be considered in a less competitive application pool, as this offering was widely disseminated well in advance of the first deadline.

Further analysis of the NIH awards data also belies the notion that submitting June 2023 offered improved possibility of funding. In this regard, grants submitted for the June 2023 cycle (when Plaintiff claims she wished to submit) and the October 2023 cycle (when she ultimately endeavored her first submission) were both funded in the NIH 2024 fiscal year. In this context, 13.4 million dollars (\$13,400,000.00) were awarded in fiscal 2024 for grants submitted in response to the PAR-23-122. This represented 23 grant awards – 7 were designated for funding in the June cycle and 15 the October cycle. Thus, more grants were actually awarded for the review cycle that included in Plaintiff's first submission (October 2023) than in the cycle that she asserts offered her a better funding possibility (June 2023).

To highlight therefore key facets relevant to Plaintiff's grant submissions and their NIH review:



- Whatever Plaintiff's beliefs about the relative competition of the timing of her initially intended submission date (June 2023) vs. her ultimate submission date (October 2023), reviewers at the latter date made nearly twice as many awards as the former.
- Despite her own acknowledgment of the benefits of the resubmission process ("And having received a good score, like B+ on my actual first submission, even if this had just tweaked a little bit up, the grant could have been potentially funded"), in fact her score on resubmission went down. This reflected reviewer concerns that she did not address weaknesses identified in initial review.

To highlight some of these key points, again note that Plaintiff's grant application for PAR-23-122 submitted to the NIH was reviewed 4/4/2024 by an Ad Hoc Study Section "ZRG1 IVBH-G (56)." Her submission received an Impact Score of 38. In this regard, approximately 50% of applications are deemed in the bottom half of the submissions and are not discussed by the Study Section committee members. The fact that her application received a score indicates that its strengths and weaknesses were discussed in open committee. These discussions resulted in specific "score-driving" rankings being ascribed to define facets of the application – Significance, Investigator(s), Innovation, Approach and Environment. In addition, because her application was discussed in open committee a NIH "Scientific Reviewer Officer" provided a synthesis of what main points were made by reviewers during discussion. This synthesis is termed the "Resume and Summary of Discussion" and highlight the most crucial score-driving facets of the application.

On this basis, the Summary Statement provided to Plaintiff included the aforementioned "Resume and Summary of Discussion" as well as Critiques from three reviewers who provided strength/weakness descriptions for each of key categories (Significance, Investigators, Innovation, etc.). The reviewers noted the significance of Plaintiff's proposed area of study. In addition, the investigative team was deemed as strong as was the environment. The reviewers nonetheless felt additional expertise in health disparities in research would be beneficial. On the other hand, key score driving weaknesses were highlighted involving the lack of attention to family engagement and home environment limits, the later bearing negatively on the overall feasibility. The final description offered by the committee was "moderate" potential to achieve scientific impact and workforce diversity. Of note, grants that achieve successful funding are generally accorded an "outstanding" description. Plaintiff's submission was graded well below this level.

As noted, for specific topics of high interest the NIH allocates devoted funds ("set aside") and actively solicits proposals ("RFAs" and "PAs"). The original PA for the ReWARD program (PAR-23-122) had multiple application dates. This indicates that for each submission cycle there were adequate funds to support meritorious proposals. In this regard, when funds are no longer available the offering is terminated. Here again, for all of the review cycles relevant for this case, the only reasonable interpretation is



that funds were indeed available for all well scored proposals and furthermore, there was no funding biases for any given cycle based upon availability of funds – in other words, each cycle had comparable funds available such that in-hand resources did not affect the funding decisions in these instances. The full availability of funds is supported by the fact that this PAR was re-issued – more funds were available for additional meritorious proposals.

As noted, after Plaintiff's first submission was not funded she resubmitted an "amended application." It is highly relevant that a very small minority of R01 applications are funded on first submission. In this regard, the Critique provided by the reviewers is the key framework of how an applicant can improve their application. Further in this context, the specific responses to review critique constitute a significant consideration by which the reviewers adjudge an amended application; failure to respond fully and completely to reviewer comments is a major etiology for a failed resubmission. That being said, it is generally assumed that rigorous response-to-reviewer critiques is the most successful means to improve a grant score. On this basis, a substantially higher proportion of successfully funded R01 are resubmissions of amended applications. To this end, the applicant has the opportunity to summarize their responses in a one page "Introduction to the Revised Application."

This document is at the front of the revised application and is likely the first document considered of Critique. Indeed, formal consideration of the Response to Reviews is an independent review category in consideration of the amended application. The Plaintiff's revised application was considered on 12/3/24. As before, the review body was an Ad Hoc Study Section constituted specifically for the ReWARD applications (PAR-23-122). The composition of the Ad Hoc Committee differed somewhat from the committee that reviewed the first application. This fact reflected only the need to constitute a committee that embodied all of the areas of expertise embodied in the applications received for this particular cycle.

Consideration of these points highlights two central concepts with respect to the Plaintiff's main assertion – that she suffered professional damage by not being able to submit her NIH grant application by the June 2023 deadline. First, it is clear that there were a number of deadlines for this specific NIH funding opportunity that offered comparable possibilities for funding based upon expert review and available funds. In this regard, it is noteworthy that the grant cycle she asserted was crucial to her ambitions ultimately made considerably fewer awards than the cycle where her submission was considered. Second, her grant submission was not deemed adequately meritorious to warrant funding on her first and second attempts. This facet embodies the important point that she utilized the opportunity to submit an amended application with the benefit of the reviewers' comments, and was still not successful in the getting of a fundable score. Further in this context, over the interval of her submission and resubmission the NIH did in fact, make a number of awards for this opportunity based on meritorious applications that embodied at a wide range of scientific themes. Thus, there were ample opportunities and resources to allow for funding of meritorious applications. The Plaintiff's efforts were simply deemed of

insufficient merit.

V. Summary and Opinion.

In summary, in my opinion, based on my experience and analysis of the materials presented in this case, the timing of Plaintiff's applications for the ReWARD Grant funding mechanism had no impact on the prospects of the same being funded. Had Plaintiff submitted by the June 2023 deadline, her score very likely would have been the same as her October 2023 submission. Her demonstrated inability to improve upon her initial submission when she re-submitted in 2024 provides further support for the conclusion that, regardless of when Plaintiff submitted her application, it would not have been funded.

VI. A list of all other cases in which, during the previous 4 years, I have testified as an expert at trial or by deposition.

1. *Alynham Pharmaceuticals, Inc. v. Pfizer Inc. et al.*, Docket No. 1:23-cv-00578 (D. Del.)
2. *Phillips et al v. Rector and Visitors of the University of Virginia et al*, Docket No. 3:22-cv-00075 (W.D. Va.)
3. *BioNTech SE v. CureVac AG*, Docket No. 1:22-cv-11202 (D. Mass.)
4. *The Trustees of the University of Pennsylvania v. Genentech, Inc.*, Docket No. 1:22-cv-00145 (D. Del.)
5. *SalioGen Therapeutics, Inc. v. DNA TwoPointO Inc. et al.*, Docket No. 1:21-cv-10525 (D. Mass.)

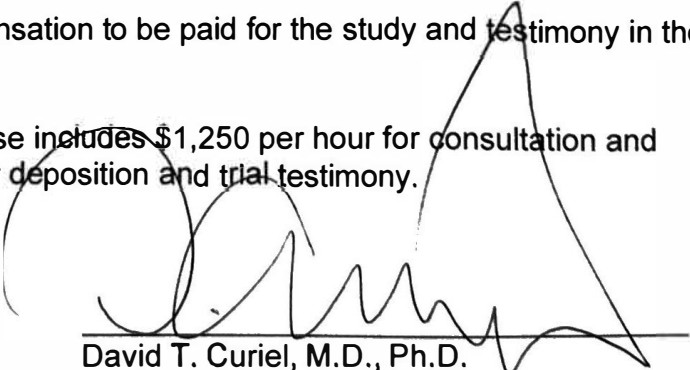
VII. A list of all publications authored in the previous 10 years.

See Exhibit 1 attached.

VIII. Statement of the compensation to be paid for the study and testimony in the case.

My compensation in this case includes \$1,250 per hour for consultation and travel time and \$1,650 per hour for deposition and trial testimony.

Dated: May 2, 2025



David T. Curiel, M.D., Ph.D.  
Professor of Radiation Oncology  
Washington University School of Medicine



# EXHIBIT 1

1. Gut-directed therapeutics in inflammatory bowel disease.  
Kratschmer C, Curiel DT, Ciorba MA.  
Curr Opin Gastroenterol. 2025 Apr 28. doi: 10.1097/MOG.0000000000001099. Online ahead of print.
2. In vivo targeted gene delivery using Adenovirus-antibody molecular glue conjugates.  
Rice-Boucher PJ, Kashentseva EA, Dmitriev IP, Guo H, Tremblay JM, Shoemaker CB, Curiel DT, Lu ZH.biorXiv [Preprint]. 2025 Feb 1:2025.01.31.635969. doi: 10.1101/2025.01.31.635969.
3. Nonreciprocity in CHIKV and MAYV Vaccine-Elicited Protection.  
Weber WC, Andoh TF, Kreklywich CN, Streblow ZJ, Denton M, Streblow MM, Powers JM, Sulgey G, Medica S, Dmitriev I, Curiel DT, Haese NN, Streblow DN.  
Vaccines (Basel). 2024 Aug 27;12(9):970. doi: 10.3390/vaccines12090970.
4. Mucosal adenovirus vaccine boosting elicits IgA and durably prevents XBB.1.16 infection in nonhuman primates.  
Gagne M, Flynn BJ, Andrew SF, Marquez J, Flebbe DR, Mychalowych A, Lamb E, Davis-Gardner ME, Burnett MR, Serebryannyy LA, Lin BC, Ziff ZE, Maule E, Carroll R, Naisan M, Jethmalani Y, Pessaint L, Todd JM, Doria-Rose NA, Case JB, Dmitriev IP, Kashentseva EA, Ying B, Dodson A, Kouneski K, O'Dell S, Wali B, Ellis M, Godbole S, Laboune F, Henry AR, Teng IT, Wang D, Wang L, Zhou Q, Zouantchangadou S, Van Ry A, Lewis MG, Andersen H, Kwong PD, Curiel DT, Roederer M, Nason MC, Foulds KE, Suthar MS, Diamond MS, Douek DC, Seder RA.  
Nat Immunol. 2024 Oct;25(10):1913-1927. doi: 10.1038/s41590-024-01951-5. Epub 2024 Sep 3.
5. Retraction Notice to: Inhibition of Multiple Protective Signaling Pathways and Ad.5/3 Delivery Enhances mda-7/IL-24 Therapy of Malignant Glioma.  
Hamed HA, Yacoub A, Park MA, Eulitt PJ, Dash R, Sarkar D, Dmitriev IP, Lesniak MS, Shah K, Grant S, Curiel DT, Fisher PB, Dent P.Mol Ther. 2024 Dec 4;32(12):4524. doi: 10.1016/j.ymthe.2024.08.020. Epub 2024 Aug 29.
6. Author Correction: Mucosal vaccine-induced cross-reactive CD8<sup>+</sup> T cells protect against SARS-CoV-2 XBB.1.5 respiratory tract infection.  
Ying B, Darling TL, Desai P, Liang CY, Dmitriev IP, Soudani N, Bricker T, Kashentseva EA, Harastani H, Raju S, Liu M, Schmidt AG, Curiel DT, Boon ACM, Diamond MS.  
Nat Immunol. 2024 Mar;25(3):578. doi: 10.1038/s41590-024-01781-5.
7. Mucosal vaccine-induced cross-reactive CD8<sup>+</sup> T cells protect against SARS-CoV-2 XBB.1.5 respiratory tract infection.  
Ying B, Darling TL, Desai P, Liang CY, Dmitriev IP, Soudani N, Bricker T, Kashentseva EA, Harastani H, Raju S, Liu M, Schmidt AG, Curiel DT, Boon ACM, Diamond MS.  
Nat Immunol. 2024 Mar;25(3):537-551. doi: 10.1038/s41590-024-01743-x. Epub 2024 Feb 9.



8. Engineering a Novel Modular Adenoviral mRNA Delivery Platform Based on Tag/Catcher Bioconjugation.  
Geng K, Rice-Boucher PJ, Kashentseva EA, Dmitriev IP, Lu ZH, Goedegebuure SP, Gillanders WE, Curiel DT.  
Viruses. 2023 Nov 20;15(11):2277. doi: 10.3390/v15112277.
  
9. Mucosal Adenoviral-vectored Vaccine Boosting Durably Prevents XBB.1.16 Infection in Nonhuman Primates.  
Gagne M, Flynn BJ, Andrew SF, Flebbe DR, Mychalowych A, Lamb E, Davis-Gardner ME, Burnett MR, Serebryanny LA, Lin BC, Pessaint L, Todd JM, Ziff ZE, Maule E, Carroll R, Naisan M, Jethmalani Y, Case JB, Dmitriev IP, Kashentseva EA, Ying B, Dodson A, Kouneski K, Doria-Rose NA, O'Dell S, Godbole S, Laboune F, Henry AR, Marquez J, Teng IT, Wang L, Zhou Q, Wali B, Ellis M, Zouantchangadou S, Ry AV, Lewis MG, Andersen H, Kwong PD, Curiel DT, Foulds KE, Nason MC, Suthar MS, Roederer M, Diamond MS, Douek DC, Seder RA.  
bioRxiv [Preprint]. 2023 Nov 8:2023.11.06.565765. doi: 10.1101/2023.11.06.565765.  
Update in: Nat Immunol. 2024 Oct;25(10):1913-1927. doi: 10.1038/s41590-024-01951-5.
  
10. Phase III Pivotal comparative clinical trial of intranasal (iNCOVACC) and intramuscular COVID 19 vaccine (Covaxin®).  
Singh C, Verma S, Reddy P, Diamond MS, Curiel DT, Patel C, Jain MK, Redkar SV, Bhate AS, Gundappa V, Konatham R, Toppo L, Joshi AC, Kushwaha JS, Singh AP, Bawankule S, Ella R, Prasad S, Ganneru B, Chiteti SR, Kataram S, Vadrevu KM.  
NPJ Vaccines. 2023 Aug 18;8(1):125. doi: 10.1038/s41541-023-00717-8.
  
11. Adenoviral vectors infect B lymphocytes in vivo.  
Rice-Boucher PJ, Mendonça SA, Alvarez AB, Sturtz AJ, Lorincz R, Dmitriev IP, Kashentseva EA, Lu ZH, Romano R, Selby M, Pingale K, Curiel DT.  
Mol Ther. 2023 Sep 6;31(9):2600-2611. doi: 10.1016/j.ymthe.2023.07.004. Epub 2023 Jul 14.
  
12. In Vitro and In Vivo Efficacy of a Stroma-Targeted, Tumor Microenvironment Responsive Oncolytic Adenovirus in Different Preclinical Models of Cancer.  
Alfano A, Cafferata EGA, Gangemi M, Nicola Candia A, Malnero CM, Bermudez I, Lopez MV, Ríos GD, Rotondaro C, Cuneo N, Curiel DT, Podhajcer OL, Lopez MV.  
Int J Mol Sci. 2023 Jun 10;24(12):9992. doi: 10.3390/ijms24129992.
  
13. A bivalent ChAd nasal vaccine protects against SARS-CoV-2 BQ.1.1 and XBB.1.5 infection and disease in mice and hamsters.  
Ying B, Darling TL, Desai P, Liang CY, Dmitriev IP, Soudani N, Bricker T, Kashentseva EA, Harastani H, Schmidt AG, Curiel DT, Boon ACM, Diamond MS.  
bioRxiv [Preprint]. 2023 May 4:2023.05.04.539332. doi: 10.1101/2023.05.04.539332.
  
14. Synthetic Biology Design as a Paradigm Shift toward Manufacturing Affordable Adeno-Associated Virus Gene Therapies.  
Collins LT, Ponnazhagan S, Curiel DT.

- ACS Synth Biol. 2023 Jan 20;12(1):17-26. doi: 10.1021/acssynbio.2c00589. Epub 2023 Jan 10.
15. Retraction Notice to: Insulin-like Growth Factor-binding Protein-7 (IGFBP7): A Promising Gene Therapeutic for Hepatocellular Carcinoma (HCC).  
Chen D, Siddiq A, Emdad L, Rajasekaran D, Gredler R, Shen XN, Santhekadur PK, Srivastava J, Robertson CL, Dmitriev I, Kashentseva EA, Curiel DT, Fisher PB, Sarkar D. Mol Ther. 2023 Feb 1;31(2):599. doi: 10.1016/j.ymthe.2022.12.019. Epub 2022 Dec 31.
16. In vivo editing of the pan-endothelium by immunity evading simian adenoviral vector.  
Lorincz R, Alvarez AB, Walkey CJ, Mendonça SA, Lu ZH, Martinez AE, Ljungberg C, Heaney JD, Lagor WR, Curiel DT.  
Biomed Pharmacother. 2023 Feb;158:114189. doi: 10.1016/j.biopha.2022.114189. Epub 2022 Dec 30.
17. A Novel Piggyback Strategy for mRNA Delivery Exploiting Adenovirus Entry Biology.  
Lee M, Rice-Boucher PJ, Collins LT, Wagner E, Aulisa L, Hughes J, Curiel DT.  
Viruses. 2022 Sep 30;14(10):2169. doi: 10.3390/v14102169.
18. Bi-allelic CAMSAP1 variants cause a clinically recognizable neuronal migration disorder.  
Khalaf-Nazzal R, Fasham J, Inskeep KA, Blizzard LE, Leslie JS, Wakeling MN, Ubeyratna N, Mitani T, Griffith JL, Baker W, Al-Hijawi F, Keough KC, Gezdirici A, Pena L, Spaeth CG, Turnpenny PD, Walsh JR, Ray R, Neilson A, Kouranova E, Cui X, Curiel DT, Pehlivan D, Akdemir ZC, Posey JE, Lupski JR, Dobyns WB, Stottmann RW, Crosby AH, Baple EL.  
Am J Hum Genet. 2022 Nov 3;109(11):2068-2079. doi: 10.1016/j.ajhg.2022.09.012. Epub 2022 Oct 24.
19. Efficient Genome Editing Achieved via Plug-and-Play Adenovirus Piggyback Transport of Cas9/gRNA Complex on Viral Capsid Surface.  
Lu ZH, Li J, Dmitriev IP, Kashentseva EA, Curiel DT.  
ACS Nano. 2022 Jul 26;16(7):10443-10455. doi: 10.1021/acsnano.2c00909. Epub 2022 Jun 24.
20. Convection Enhanced Delivery of the Oncolytic Adenovirus Delta24-RGD in Patients with Recurrent GBM: A Phase I Clinical Trial Including Correlative Studies.  
van Putten EHP, Kleijn A, van Beusechem VW, Noske D, Lamers CHJ, de Goede AL, Idema S, Hoefnagel D, Kloezezan JJ, Fueyo J, Lang FF, Teunissen CE, Vernhout RM, Bakker C, Gerritsen W, Curiel DT, Vulto A, Lamfers MLM, Dirven CMF.  
Clin Cancer Res. 2022 Apr 14;28(8):1572-1585. doi: 10.1158/1078-0432.CCR-21-3324.
21. Multiple Treatment Cycles of Neural Stem Cell Delivered Oncolytic Adenovirus for the Treatment of Glioblastoma.  
Batalla-Covello J, Ngai HW, Flores L, McDonald M, Hyde C, Gonzaga J, Hammad M, Gutova M, Portnow J, Synold T, Curiel DT, Lesniak MS, Aboody KS, Mooney R.  
Cancers (Basel). 2021 Dec 16;13(24):6320. doi: 10.3390/cancers13246320.



22. Synthetic Biology Approaches for Engineering Next-Generation Adenoviral Gene Therapies.  
Collins LT, Curiel DT.  
ACS Nano. 2021 Sep 28;15(9):13970-13979. doi: 10.1021/acsnano.1c04556. Epub 2021 Aug 20.  
PMID: 34415739
23. Adenoviral vector vaccine platforms in the SARS-CoV-2 pandemic.  
Mendonça SA, Lorincz R, Boucher P, Curiel DT.  
NPJ Vaccines. 2021 Aug 5;6(1):97. doi: 10.1038/s41541-021-00356-x.
24. Vector Strategies to Actualize B Cell-Based Gene Therapies.  
Jeske AM, Boucher P, Curiel DT, Voss JE.  
J Immunol. 2021 Aug 1;207(3):755-764. doi: 10.4049/jimmunol.2100340.
25. Gonzalez-Pastor R, Goedegebuure PS, Curiel DT. Understanding and addressing barriers to successful adenovirus-based virotherapy for ovarian cancer. Cancer gene therapy. 2021;28(5):375-89. Epub 2020/09/21. doi: 10.1038/s41417-020-00227-y. PubMed PMID: 32951021; PMCID: PMC8119242.
26. Hassan AO, Kafai NM, Dmitriev IP, Fox JM, Smith BK, Harvey IB, Chen RE, Winkler ES, Wessel AW, Case JB, Kashentseva E, McCune BT, Bailey AL, Zhao H, VanBlargan LA, Dai YN, Ma M, Adams LJ, Shrihari S, Danis JE, Gralinski LE, Hou YJ, Schafer A, Kim AS, Keeler SP, Weiskopf D, Baric RS, Holtzman MJ, Fremont DH, Curiel DT, Diamond MS. A Single-Dose Intranasal ChAd Vaccine Protects Upper and Lower Respiratory Tracts against SARS-CoV-2. Cell. 2020;183(1):169-84 e13. Epub 2020/09/16. doi: 10.1016/j.cell.2020.08.026. PubMed PMID: 32931734; PMCID: PMC7437481.
27. Boucher P, Cui X, Curiel DT. Adenoviral vectors for in vivo delivery of CRISPR-Cas gene editors. Journal of controlled release : official journal of the Controlled Release Society. 2020;327:788-800. Epub 2020/09/07. doi: 10.1016/j.jconrel.2020.09.003. PubMed PMID: 32891680; PMCID: PMC8091654.
28. Lorincz R, Curiel DT. Advances in Alpha-1 Antitrypsin Gene Therapy. American journal of respiratory cell and molecular biology. 2020;63(5):560-70. Epub 2020/07/16. doi: 10.1165/rcmb.2020-0159PS. PubMed PMID: 32668173; PMCID: PMC7605164.
29. Lu ZH, Dmitriev IP, Brough DE, Kashentseva EA, Li J, Curiel DT. A New Gorilla Adenoviral Vector with Natural Lung Tropism Avoids Liver Toxicity and Is Amenable to Capsid Engineering and Vector Retargeting. Journal of virology. 2020;94(10). Epub 2020/02/28. doi: 10.1128/JVI.00265-20. PubMed PMID: 32102889; PMCID: PMC7199421.
30. Lee M, Lu ZH, Li J, Kashentseva EA, Dmitriev IP, Mendonca SA, Curiel DT. Targeting Tumor Neoangiogenesis via Targeted Adenoviral Vector to Achieve Effective Cancer Gene Therapy for Disseminated Neoplastic Disease. Molecular cancer therapeutics.

2020;19(3):966-71. Epub 2020/01/08. doi: 10.1158/1535-7163.MCT-19-0768. PubMed PMID: 31907220; PMCID: PMC7155772.

31. Stephens CJ, Lauron EJ, Kashentseva E, Lu ZH, Yokoyama WM, Curiel DT. Long-term correction of hemophilia B using adenoviral delivery of CRISPR/Cas9. *Journal of controlled release : official journal of the Controlled Release Society*. 2019;298:128-41. Epub 2019/02/17. doi: 10.1016/j.jconrel.2019.02.009. PubMed PMID: 30771412.
32. Mooney R, Majid AA, Batalla-Covello J, Machado D, Liu X, Gonzaga J, Tirughana R, Hammad M, Lesniak MS, Curiel DT, Aboody KS. Enhanced Delivery of Oncolytic Adenovirus by Neural Stem Cells for Treatment of Metastatic Ovarian Cancer. *Molecular therapy oncolytics*. 2019;12:79-92. Epub 2019/02/06. doi: 10.1016/j.omto.2018.12.003. PubMed PMID: 30719498; PMCID: PMC6350263.
33. Hassan AO, Dmitriev IP, Kashentseva EA, Zhao H, Brough DE, Fremont DH, Curiel DT, Diamond MS. A Gorilla Adenovirus-Based Vaccine against Zika Virus Induces Durable Immunity and Confers Protection in Pregnancy. *Cell reports*. 2019;28(10):2634-46 e4. Epub 2019/09/05. doi: 10.1016/j.celrep.2019.08.005. PubMed PMID: 31484074; PMCID: PMC6750284.
34. Gonzalez-Pastor R, Ashshi AM, El-Shemi AG, Dmitriev IP, Kashentseva EA, Lu ZH, Goedegebuure SP, Podhajcer OL, Curiel DT. Defining a murine ovarian cancer model for the evaluation of conditionally replicative adenovirus (CRAd) virotherapy agents. *Journal of ovarian research*. 2019;12(1):18. Epub 2019/02/16. doi: 10.1186/s13048-019-0493-5. PubMed PMID: 30767772; PMCID: PMC6376676.
35. van Winkel CAJ, Moreno A, Curiel DT. Capsid-Incorporation Strategy To Display Antigens for an Alternative Adenoviral Vector Vaccine Approach. *Molecular pharmaceutics*. 2018;15(12):5446-53. Epub 2018/10/26. doi: 10.1021/acs.molpharmaceut.8b00591. PubMed PMID: 30359030.
36. Stephens CJ, Kashentseva E, Everett W, Kaliberova L, Curiel DT. Targeted in vivo knock-in of human alpha-1-antitrypsin cDNA using adenoviral delivery of CRISPR/Cas9. *Gene therapy*. 2018;25(2):139-56. Epub 2018/03/29. doi: 10.1038/s41434-018-0003-1. PubMed PMID: 29588497; PMCID: PMC5919923.
37. Sharma PK, Dmitriev IP, Kashentseva EA, Raes G, Li L, Kim SW, Lu ZH, Arbeit JM, Fleming TP, Kaliberov SA, Goedegebuure SP, Curiel DT, Gillanders WE. Development of an adenovirus vector vaccine platform for targeting dendritic cells. *Cancer gene therapy*. 2018;25(1-2):27-38. Epub 2017/12/16. doi: 10.1038/s41417-017-0002-1. PubMed PMID: 29242639; PMCID: PMC5972836.
38. Fonseca JA, McCaffery JN, Caceres J, Kashentseva E, Singh B, Dmitriev IP, Curiel DT, Moreno A. Inclusion of the murine IgGkappa signal peptide increases the cellular immunogenicity of a simian adenoviral vectored Plasmodium vivax multistage vaccine.

- Vaccine. 2018;36(20):2799-808. Epub 2018/04/17. doi: 10.1016/j.vaccine.2018.03.091. PubMed PMID: 29657070; PMCID: PMC6124663.
39. Chondronasiou D, Eisden T, Stam AGM, Matthews QL, Icyuz M, Hooijberg E, Dmitriev I, Curiel DT, de Gruijl TD, van de Ven R. Improved Induction of Anti-Melanoma T Cells by Adenovirus-5/3 Fiber Modification to Target Human DCs. *Vaccines*. 2018;6(3). Epub 2018/07/20. doi: 10.3390/vaccines6030042. PubMed PMID: 30022005; PMCID: PMC6161112.
  40. Prima V, Kaliberova LN, Kaliberov S, Curiel DT, Kusmartsev S. COX2/mPGES1/PGE2 pathway regulates PD-L1 expression in tumor-associated macrophages and myeloid-derived suppressor cells. *Proceedings of the National Academy of Sciences of the United States of America*. 2017;114(5):1117-22. Epub 2017/01/18. doi: 10.1073/pnas.1612920114. PubMed PMID: 28096371; PMCID: PMC5293015.
  41. Naoum GE, Zhu ZB, Buchsbaum DJ, Curiel DT, Arafat WO. Survivin a radiogenetic promoter for glioblastoma viral gene therapy independently from CARG motifs. *Clinical and translational medicine*. 2017;6(1):11. Epub 2017/03/03. doi: 10.1186/s40169-017-0140-y. PubMed PMID: 28251571; PMCID: PMC5332320.
  42. Lu ZH, Kaliberov S, Sohn RE, Kaliberova L, Du Y, Prior JL, Leib DJ, Chauchereau A, Sehn JK, Curiel DT, Arbeit JM. A new model of multi-visceral and bone metastatic prostate cancer with perivascular niche targeting by a novel endothelial specific adenoviral vector. *Oncotarget*. 2017;8(7):12272-89. Epub 2017/01/20. doi: 10.18632/oncotarget.14699. PubMed PMID: 28103576; PMCID: PMC5355343.
  43. Kuroki LM, Jin X, Dmitriev IP, Kashentseva EA, Powell MA, Mutch DG, Dietz AB, Curiel DT, Hawkins WG, Spitzer D. Adenovirus platform enhances transduction efficiency of human mesenchymal stem cells: An opportunity for cellular carriers of targeted TRAIL-based TR3 biologics in ovarian cancer. *PloS one*. 2017;12(12):e0190125. Epub 2017/12/22. doi: 10.1371/journal.pone.0190125. PubMed PMID: 29267342; PMCID: PMC5739501.
  44. Fonseca JA, McCaffery JN, Kashentseva E, Singh B, Dmitriev IP, Curiel DT, Moreno A. A prime-boost immunization regimen based on a simian adenovirus 36 vectored multi-stage malaria vaccine induces protective immunity in mice. *Vaccine*. 2017;35(24):3239-48. Epub 2017/05/10. doi: 10.1016/j.vaccine.2017.04.062. PubMed PMID: 28483199; PMCID: PMC5522619.
  45. Covington MF, Curiel CN, Lattimore L, Avery RJ, Kuo PH. FDG-PET/CT for Monitoring Response of Melanoma to the Novel Oncolytic Viral Therapy Talimogene Laherparepvec. *Clinical nuclear medicine*. 2017;42(2):114-5. Epub 2016/12/07. doi: 10.1097/rlu.0000000000001456. PubMed PMID: 27922859.
  46. Wambach JA, Yang P, Wegner DJ, Heins HB, Kaliberova LN, Kaliberov SA, Curiel DT, White FV, Hamvas A, Hackett BP, Cole FS. Functional Characterization of ATP-Binding



Cassette Transporter A3 Mutations from Infants with Respiratory Distress Syndrome. *American journal of respiratory cell and molecular biology*. 2016;55(5):716-21. Epub 2016/11/01. doi: 10.1165/rcmb.2016-0008OC. PubMed PMID: 27374344; PMCID: PMC5105181.

47. Tatzel K, Kuroki L, Dmitriev I, Kashentseva E, Curiel DT, Goedegebuure SP, Powell MA, Mutch DG, Hawkins WG, Spitzer D. Erratum: Membrane-proximal TRAIL species are incapable of inducing short circuit apoptosis signaling: Implications for drug development and basic cytokine biology. *Scientific reports*. 2016;6:25217. Epub 2016/05/05. doi: 10.1038/srep25217. PubMed PMID: 27142169; PMCID: PMC4855175.
48. Tatzel K, Kuroki L, Dmitriev I, Kashentseva E, Curiel DT, Goedegebuure SP, Powell MA, Mutch DG, Hawkins WG, Spitzer D. Membrane-proximal TRAIL species are incapable of inducing short circuit apoptosis signaling: Implications for drug development and basic cytokine biology. *Scientific reports*. 2016;6:22661. Epub 2016/03/05. doi: 10.1038/srep22661. PubMed PMID: 26935795; PMCID: PMC4776141
49. Stroud C, Dmitriev I, Kashentseva E, Bryan JN, Curiel DT, Rindt H, Reinero C, Henry CJ, Bergman PJ, Mason NJ, Gnanandarajah JS, Engiles JB, Gray F, Laughlin D, Gaurier-Hausser A, Wallecha A, Huebner M, Paterson Y, O'Connor D, Trembl LS, Stannard JP, Cook JL, Jacobs M, Wyckoff GJ, Likins L, Sabbagh U, Skaff A, Guloy AS, Hays HD, LeBlanc AK, Coates JR, Katz ML, Lyons LA, Johnson GC, Johnson GS, O'Brien DP, Duan D, Calvet JP, Gandolfi B, Baron DA, Weiss ML, Webster DA, Karanu FN, Robb EJ, Harman RJ. A One Health overview, facilitating advances in comparative medicine and translational research. *Clinical and translational medicine*. 2016;5(Suppl 1):26. Epub 2016/08/26. doi: 10.1186/s40169-016-0107-4. PubMed PMID: 27558513; PMCID: PMC4996801.
50. Schmidt DJ, Beamer G, Tremblay JM, Steele JA, Kim HB, Wang Y, Debatis M, Sun X, Kashentseva EA, Dmitriev IP, Curiel DT, Shoemaker CB, Tzipori S. A Tetraspecific VHH-Based Neutralizing Antibody Modifies Disease Outcome in Three Animal Models of *Clostridium difficile* Infection. *Clinical and vaccine immunology : CVI*. 2016;23(9):774-84. Epub 2016/07/15. doi: 10.1128/cvi.00730-15. PubMed PMID: 27413067; PMCID: PMC5014919.
51. Othman ER, Curiel DT, Hussein M, Abdelaal, II, Fetih AN, Al-Hendy A. Enhancing Adenoviral-Mediated Gene Transfer and Expression to Endometrial Cells. *Reproductive sciences (Thousand Oaks, Calif)*. 2016;23(8):1109-15. Epub 2016/02/13. doi: 10.1177/1933719116630420. PubMed PMID: 26865542.
52. Moayeri M, Tremblay JM, Debatis M, Dmitriev IP, Kashentseva EA, Yeh AJ, Cheung GY, Curiel DT, Leppla S, Shoemaker CB. Adenoviral Expression of a Bispecific VHH-Based Neutralizing Agent That Targets Protective Antigen Provides Prophylactic Protection from Anthrax in Mice. *Clinical and vaccine immunology : CVI*. 2016;23(3):213-8. Epub 2016/01/08. doi: 10.1128/cvi.00611-15. PubMed PMID: 26740390; PMCID: PMC4783422.

53. Kaliberov SA, Kaliberova LN, Yan H, Kapoor V, Hallahan DE. Retargeted adenoviruses for radiation-guided gene delivery. *Cancer gene therapy*. 2016;23(9):303-14. Epub 2016/08/06. doi: 10.1038/cgt.2016.32. PubMed PMID: 27492853; PMCID: PMC5031535.
54. Fonseca JA, Cabrera-Mora M, Kashentseva EA, Villegas JP, Fernandez A, Van Pelt A, Dmitriev IP, Curiel DT, Moreno A. A Plasmodium Promiscuous T Cell Epitope Delivered within the Ad5 Hexon Protein Enhances the Protective Efficacy of a Protein Based Malaria Vaccine. *PloS one*. 2016;11(4):e0154819. Epub 2016/04/30. doi: 10.1371/journal.pone.0154819. PubMed PMID: 27128437; PMCID: PMC4851317.
55. Cabrera-Mora M, Fonseca JA, Singh B, Zhao C, Makarova N, Dmitriev I, Curiel DT, Blackwell J, Moreno A. A Recombinant Chimeric Ad5/3 Vector Expressing a Multistage Plasmodium Antigen Induces Protective Immunity in Mice Using Heterologous Prime-Boost Immunization Regimens. *Journal of immunology (Baltimore, Md : 1950)*. 2016;197(7):2748-61. Epub 2016/08/31. doi: 10.4049/jimmunol.1501926. PubMed PMID: 27574299; PMCID: PMC5028125.
56. Buggio M, Towe C, Annan A, Kaliberov S, Lu ZH, Stephens C, Arbeit JM, Curiel DT. Pulmonary vasculature directed adenovirus increases epithelial lining fluid alpha-1 antitrypsin levels. *The journal of gene medicine*. 2016;18(1-3):38-44. Epub 2016/01/31. doi: 10.1002/jgm.2874. PubMed PMID: 26825735.
57. Bhatia S, O'Bryan SM, Rivera AA, Curiel DT, Mathis JM. CXCL12 retargeting of an adenovirus vector to cancer cells using a bispecific adapter. *Oncolytic virotherapy*. 2016;5:99-113. Epub 2016/12/14. doi: 10.2147/ov.s112107. PubMed PMID: 27957479; PMCID: PMC5113939.
58. Ashshi AM, El-Shemi AG, Dmitriev IP, Kashentseva EA, Curiel DT. Combinatorial strategies based on CRAd-IL24 and CRAd-ING4 virotherapy with anti-angiogenesis treatment for ovarian cancer. *Journal of ovarian research*. 2016;9(1):38. Epub 2016/06/29. doi: 10.1186/s13048-016-0248-5. PubMed PMID: 27349517; PMCID: PMC4924320.
59. Abdelaziz M, Sherif L, ElKhiary M, Nair S, Shalaby S, Mohamed S, Eziba N, El-Lakany M, Curiel D, Ismail N, Diamond MP, Al-Hendy A. Targeted Adenoviral Vector Demonstrates Enhanced Efficacy for In Vivo Gene Therapy of Uterine Leiomyoma. *Reproductive sciences (Thousand Oaks, Calif)*. 2016;23(4):464-74. Epub 2016/02/18. doi: 10.1177/1933719116630413. PubMed PMID: 26884457; PMCID: PMC5933189.
60. Wilkinson-Ryan I, Kim J, Kim S, Ak F, Dodson L, Colonna M, Powell M, Mutch D, Spitzer D, Hansen T, Goedegebuure SP, Curiel D, Hawkins W. Incorporation of porcine adenovirus 4 fiber protein enhances infectivity of adenovirus vector on dendritic cells: implications for immune-mediated cancer therapy. *PloS one*. 2015;10(5):e0125851. Epub 2015/05/02. doi: 10.1371/journal.pone.0125851. PubMed PMID: 25933160; PMCID: PMC4416912.

61. Weber HL, Gidekel M, Werbach S, Salvatierra E, Rotondaro C, Sganga L, Haab GA, Curiel DT, Cafferata EG, Podhajcer OL. A Novel CDC25B Promoter-Based Oncolytic Adenovirus Inhibited Growth of Orthotopic Human Pancreatic Tumors in Different Preclinical Models. *Clinical cancer research : an official journal of the American Association for Cancer Research*. 2015;21(7):1665-74. Epub 2015/01/13. doi: 10.1158/1078-0432.ccr-14-2316. PubMed PMID: 25573380.
62. van Erp EA, Kaliberova LN, Kaliberov SA, Curiel DT. Retargeted oncolytic adenovirus displaying a single variable domain of camelid heavy-chain-only antibody in a fiber protein. *Molecular therapy oncolytics*. 2015;2:15001. Epub 2015/01/01. doi: 10.1038/mto.2015.1. PubMed PMID: 27119101; PMCID: PMC4782946.
63. Sheoran AS, Dmitriev IP, Kashentseva EA, Cohen O, Mukherjee J, Debatis M, Shearer J, Tremblay JM, Beamer G, Curiel DT, Shoemaker CB, Tzipori S. Adenovirus vector expressing Stx1/Stx2-neutralizing agent protects piglets infected with *Escherichia coli* O157:H7 against fatal systemic intoxication. *Infection and immunity*. 2015;83(1):286-91. Epub 2014/11/05. doi: 10.1128/iai.02360-14. PubMed PMID: 25368111; PMCID: PMC4288880.
64. Sakr HI, Coleman DT, Cardelli JA, Mathis JM. Characterization of an Oncolytic Adenovirus Vector Constructed to Target the cMet Receptor. *Oncolytic virotherapy*. 2015;4:119-32. Epub 2016/02/13. doi: 10.2147/ov.s87369. PubMed PMID: 26866014; PMCID: PMC4746000.
65. Kim JW, Kane JR, Young JS, Chang AL, Kanojia D, Morshed RA, Miska J, Ahmed AU, Balyasnikova IV, Han Y, Zhang L, Curiel DT, Lesniak MS. A Genetically Modified Adenoviral Vector with a Phage Display Derived Peptide Incorporated into Fiber Fibrin Chimera Prolongs Survival in Experimental Glioma. *Human gene therapy*. 2015;26(9):635-46. Epub 2015/06/11. doi: 10.1089/hum.2015.008. PubMed PMID: 26058317; PMCID: PMC4575547.
66. Ghisays F, Brace CS, Yackly SM, Kwon HJ, Mills KF, Kashentseva E, Dmitriev IP, Curiel DT, Imai SI, Ellenberger T. The N-Terminal Domain of SIRT1 Is a Positive Regulator of Endogenous SIRT1-Dependent Deacetylation and Transcriptional Outputs. *Cell reports*. 2015;10(10):1665-73. Epub 2015/03/17. doi: 10.1016/j.celrep.2015.02.036. PubMed PMID: 25772354; PMCID: PMC4565781.
67. Everett WH, Curiel DT. Gene therapy for radioprotection. *Cancer gene therapy*. 2015;22(4):172-80. Epub 2015/02/28. doi: 10.1038/cgt.2015.8. PubMed PMID: 25721205; PMCID: PMC4608443.
68. Dobbins GC, Ugai H, Curiel DT, Gillespie GY. A Multi Targeting Conditionally Replicating Adenovirus Displays Enhanced Oncolysis while Maintaining Expression of Immunotherapeutic Agents. *PloS one*. 2015;10(12):e0145272. Epub 2015/12/23. doi: 10.1371/journal.pone.0145272. PubMed PMID: 26689910; PMCID: PMC4687127.



69. Beatty MS, Timares L, Curiel DT. Augmented adenovirus transduction of murine T lymphocytes utilizing a bi-specific protein targeting murine interleukin 2 receptor. *Cancer gene therapy*. 2015;22(4):222. Epub 2015/04/24. doi: 10.1038/cgt.2015.13. PubMed PMID: 25904493